

Title (en)
Color picture tube.

Title (de)
Farbbildröhre.

Title (fr)
Tube d'images en couleurs.

Publication
EP 0407980 A1 19910116 (EN)

Application
EP 90113170 A 19900710

Priority
JP 17822089 A 19890711

Abstract (en)
A color picture tube comprising an envelope (1) including a front panel (2), a phosphor screen (6) formed in the inner surface of the front panel (2), and an electron gun (5) arranged in the envelope (1). The phosphor screen (6) includes a light absorbing layer (12) having a plurality of holes (13) and phosphor layers (14) formed in the holes (13) so as to partially overlap the light absorbing layer (12). The transmittance T of the light absorbing layer (12), the ratio a of the area of a light emitting region in a portion (14a) where the light absorbing layer (12) overlaps the phosphor layers (14) to the area of the phosphor screen (6), the ratio b of the area of the light absorbing layer (12) to the area of the phosphor screen (6), and the ratio r of the light emitting region (12) in the holes (13) to the area of the holes (13) satisfy the following relational expression: $1/T \geq 1/2\{(rb/a) - [a/(1-b)r]\}$.

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H01J 29/28; H01J 29/30

IPC 8 full level
H01J 29/32 (2006.01)

CPC (source: EP KR US)
H01J 9/22 (2013.01 - KR); **H01J 29/20** (2013.01 - KR); **H01J 29/32** (2013.01 - EP US); **H01J 29/322** (2013.01 - EP US);
H01J 29/325 (2013.01 - EP US); **H01J 29/327** (2013.01 - EP US)

Citation (search report)
• [A] US 4205255 A 19800527 - TOMITA YOSHIFUMI [JP]
• [A] GB 2096822 A 19821020 - HITACHI LTD

Cited by
EP0410386A3; EP1061548A3

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0407980 A1 19910116; EP 0407980 B1 19930929; CN 1018406 B 19920923; CN 1048769 A 19910123; DE 69003610 D1 19931104;
DE 69003610 T2 19940120; JP H0343940 A 19910225; KR 910003739 A 19910228; KR 930000790 B1 19930204; US 5148082 A 19920915

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